CLAIMS

We claim:

1. A truncated glucanase having an amino acid sequence with a total number of amino acid residues between 200 and 321, at least 200 of said amino acid residues forming a linear sequence substantially identical to a portion of the amino acid sequence of a wild-type glucanase from *Fibrobacter succinogenes*.

2. The truncated form of glucanase of claim 1, wherein said linear sequence contains no PXSSSS repeats.

3. The truncated form of glucanase of claim 1, wherein said amino acid sequence of a wild-type glucanase is identical to SEQ ID NO: 3 in FIG 6.

4. The truncated form of glucanase of claim 3, wherein said portion of the amino acid sequence starts from residue 25 of SEQ ID NO: 3 in FIG. 6 and extends towards the C-terminal of SEQ ID NO:3, covering less than 321 amino acid residues.

5. The truncated form of glucanase of claim 4, wherein said portion of the amino acid sequence covers more than 246 amino acid residues.

6. The truncated form of glucanase of claim 1, having an amino acid sequence substantially identical to SEQ ID NO:1 in FIG 2.

7. The truncated form of glucanase of claim 1, having an amino acid sequence substantially identical to SEQ ID NO:2 in FIG 3.

8. A DNA fragment having an initiation codon, a stop codon and a coding sequence between said two codons, said coding sequence substantially corresponding to said amino acid sequence of claim 1.

9. The DNA fragment of claim 8, wherein said DNA fragment has a sequence of nucleotide residues substantially identical to SEQ ID NO: 4 in FIG 2.

10. The DNA fragment of claim 8, wherein said DNA fragment has a sequence of nucleotide residues substantially identical to SEQ ID NO: 5 in FIG 3.

11. A method of producing said truncated glucanase of claim 1, comprising:

(a) growing in a culture medium a bacterial strain carrying a plasmid containing a gene encoding for a wild-type 1,3-1,4-β-D-glucanase from *Fibrobacter succinogenes*,

(b) adding to said culture medium an inducer to induce expression of said gene and continuing said growing of step (a),

(c) centrifuging said culture medium to produce a supernatant,

(d) incubating said supernatant to produce said truncated glucanase, and

(e) collecting and purifying said truncated glucanase from said supernatant.

12. The method of claim 11, wherein said supernatant in step (d) is incubated for at least 7 days at 4 °C or a higher temperature.

13. The method of claim 11, wherein said supernatant in step (d) is incubated for a period ranging from 10 days to 14 days and at a temperature ranging from 4 °C to 37 °C.

14 The method of claim 11, wherein said supernatant in step (d) is incubated for 14 days at 37 °C.

15. A method of producing said truncated glucanase of claim 1, comprising:

(a) amplifying a DNA fragment using a PCR method from a DNA template containing a gene encoding for a wild-type glucanase from *Fibrobacter succinogenes*, said DNA fragment substantially corresponding to a portion of said gene,

(b) subcloning said amplified DNA fragment in an expression vector,

(c) transferring said expression vector harbouring said DNA fragment into a bacterial strain,

(d) growing said bacterial strain in a culture medium for a period of time and inducing expression of said DNA fragment, with or without adding an inducer, to produce a sufficient amount of protein products, and

(e) collecting and purifying protein expression products from said culture medium.

16. The method of claim 15, wherein said DNA fragment amplified in step (a) has a sequence substantially identical to SEQ ID NO: 6 in FIG. 6.